REMARKS

This amendment is submitted in response to the Office Action dated May 3, 2007. Reconsideration and allowance of the claims are requested. In the Office Action, claims 1-5, 10-13, 18-23, and 27-31 stand rejected under 35 USC §103(a) as unpatentable over Zuk (US Pub. 2004/0030927), which includes the teachings of previously cited RFC document Internet Protocol, RFC 791 in further view of DARPA Internet Program Protocol Specification, September 1981 (hereinafter RFC), in further view of Zuk (US Pub. 2003/0154399), and in further view of Vairavan (US Pub. 2002/0083344). Claims 6-9 and 14-17 stand rejected under 35 USC §103(a) as unpatentable over the above described combination in view of Mogul (Path MTU Discover, RFC 1191, November 1990). These rejections are respectfully traversed.

To expedite the processing of the present application, the Applicant herewith cancels claims 22-27. The Applicant has also amended claim 1 to incorporate claim 28, previously dependent on claim 1, to clearly spell out the relationship between the Address Research Table (ART), the Connection Table (CT) and the Network-Address Translation Table (NT). These tables facilitate the tracking, sorting and collecting of fragments to fully reconstitute a packet prior to applying firewall policies. Thus, no new issue is presented.

As claimed, the present system includes a Connection Table CT, a Network-Address Translation Table NT and an Address Research Table ART for each packet. Indices for the tables are stored in the other tables to establish cross linking, and the indices are computed by hashing values for an entry identifying fragments which are to be assembled into the reconstituted packets so that firewall policies may be applied. Thus, each NT entry is cross linked with a corresponding CT entry, and each CT entry is cross linked with a corresponding with NT entry, with the ART enabling and facilitating the cross linking.

Following a link to a corresponding entry in anther table is less computationally intensive than looking up an entry by checking for matches in a list of values. Additionally, by storing a hash of an entry, as is claimed in both of the pending independent claims 1 and 11, multiple computation of such a hash is avoided, thereby

reducing the use of computational resources. Thus, each of the CT and NT stores links to the ART through a hashed entry. Storing an ART index for each ART entry in the ART table stores information associated with the delivery of a packet to facilitate assembly of the fragments into the packet. Once a match to an index is found in the CT or NT, an ART index may be obtained that permits a destination address for the first packet of a connection and enables firewalling and transmission of subsequent packets.

Cross linking of the NT and CT with the ART, as facilitated by the stored hash of at least one of the tables as recited in independent claims 1 and 11, is not disclosed in any of the references. The Examiner concedes that the Zuk references, defined as including the internet protocol documents, do not disclose the use of an NT table or cross linking of an NT to a CT. The Examiner does argue that Zuk teaches the use of a hash function at Zuk '399 paragraph [0093]. However, this is all that Zuk teaches. Zuk teaches the hash of a five-tuple to track the flow of a list of packets in a flow table 55. He does not describe this in conjunction with, or in anyway to facilitate the use of, cross link tables, can be used to track the fragments that make up a packet.

Because of this fundamental distinction, the Examiner cites Vairavan, which teaches a NT table for translating packets from external to internal addresses. However, Vairavan, like Zuk, lacks the basic teaching of both a CT and an NT, which are cross linked by mutually stored indices, as specifically claimed herein. Further, neither reference describes hashing indices for at least a portion of several fragments, which may make up a single packet, as further claimed herein.

Finally, the Examiner seems to be arguing, at the last paragraph on page 4 of the Office Action that cross linking of the NT and CT would somehow inherently occur. There is no evidence to support this inherency argument, as Vairavan only discloses the standard use of an NT table, and Zuk only discloses the standard use of a hash function based on a five-tuple key, as described at Zuk '399 paragraph [0093].

The Applicant also has reviewed the Mogul reference, relied on by the Examiner. However, Mogul also does not teach the cross linked table or the use of hash functions to facilitate tracking and assembly of fragments to completed packets, as claimed herein.

Since the references cited by the Examiner lack any teachings of a relationship between one or more of the NT, CT and ART based on storage of computed hash functions, the hash being based on at least a portion of stored fragments to be assembled into a completed packet implementing to firewall policies, reconsideration and allowance of the pending claims is respectively requested.

In view of these clear arguments, reconsideration and allowance of the claims are respectfully requested.

Respectfully submitted,

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